

SPECIFICATION AMENDMENTS

IN THE SPECIFICATION:

1. Please replace the paragraph beginning at Page 4, Line 6 with the following amended paragraph.

In a particular embodiment, a method for fabricating an AAPS photomask with improved intensity balance is disclosed that includes the operation of forming an alternating aperture phase shifting photomask pattern on a substrate, including forming trenches within the substrate. The method further includes forming a layer of antireflective material within the bottom of at least one trench. More particularly, the method includes forming the layer of antireflective material from Magnesium Fluoride (~~MgF2~~) (MgF₂) or another material with a refractive index less than the refractive index of the substrate. Furthermore the antireflective layer may be formed using a vacuum evaporation technique. The layer of antireflective material formed at the bottom of the trench areas increases the transmission of light through the trench areas by improving light coupling into the trench. Another embodiment of the invention may include an enhanced AAPS photomask fabricated according to the above method.

2. Please replace the paragraph beginning at Page 11, Line 1 with the following amended paragraph.

In the present embodiment, AR layer 120 is preferably formed from Magnesium Fluoride (~~MgF2~~) (MgF₂) or another suitable AR material. Further, AR layer 120 may preferably be deposited by vacuum evaporation or another suitable technique.

3. Please replace the paragraph beginning at Page 13, Line 3 with the following amended paragraph.

After optical absorber 114 and substrate 112 have been etched, AR layer 120 is preferably deposited in trench 116 as shown in FIGURE 5E and block 211. In a preferred embodiment, AR layer 120 may be a layer of Magnesium Fluoride (~~MgF2~~) (MgF₂) deposited via vacuum evaporation or another suitable technique. The thickness of AR layer 120 is preferably selected as described in FIGURE 4, above.